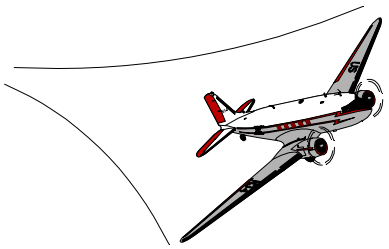
SPECIAL AIRWORTHINESS INFORMATION **BULLETIN**



U.S. Department of Transportation

Federal Aviation Administration

Aircraft Certification Service
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This is information only. Recommendations are not mandatory.

INTRODUCTION

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to alert all operators, pilots and principal operations inspectors (POIs) that a CFM56-3 powered Boeing 737-300 made an emergency landing due to a sustained power loss of both engines during inclement weather. This bulletin also reinforces recommendations concerning aircraft/engine operation in and around areas of inclement weather.

BACKGROUND

In January 2002, a Boeing 737-300 aircraft made an emergency landing in an Indonesian river after encountering heavy precipitation, which may have included hail, during a very severe thunderstorm. During the weather encounter, the aircraft experienced a power loss of both engines. Multiple restart attempts of the engines were unsuccessful, as was an attempt to start the auxiliary power unit (APU).

The aircraft was descending in what has been described as a constant speed descent to the airport. Both engines lost power while passing through 18,500 feet.

- Ninety (90) seconds prior to engine power loss, the aircraft entered a rain cloud. The cockpit voice recorder (CVR) indicated a noticeable increase in external noise.

- At twenty (20) seconds prior to engine power loss, the CVR indicated a further increase in external noise.

- At the point of engine power loss, the engines rolled back simultaneously from approximately 70% to 50% N2 (engine core rotor speed) with decreasing fuel flow. Generators were lost at this point.

RECOMMENDATIONS

By issuing this SAIB, the FAA is alerting all operators, pilots and POIs to avoid severe weather whenever possible. Pilots should also be familiar with weather restrictions in the aircraft flight manual and emergency in-flight restart procedures. Flight in moderate to heavy rain, hail, sleet and turbulence could adversely effect engine operation, especially at lower engine power levels. If encountered, it is extremely important that flight crews comply with the appropriate instructions found in aircraft operations documents dealing with moderate to severe weather, heavy rain/hail, sleet and turbulence. These may include:

(a) Minimum power setting procedures

Note: If inclement weather is unavoidable, the FAA recommends that for most turbofan engine applications, maintaining an increased minimum thrust setting will improve engine tolerance to water and hail ingestion.)

(b) Minimize throttle movement

Note: Thrust changes made in the midst of extremely heavy precipitation should be made slowly and the engine stabilized at the selected thrust setting prior to reversing the thrust lever direction. Disengaging the autothrottle is recommended.)

(c) Turn ignition on and/or auto re-light system enabled

(d) Observe engine cowl anti-icing procedures during icing conditions

(e) Start the APU, if available, to provide quick access to backup electrical and pneumatic sources.

FOR FURTHER INFORMATION CONTACT

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